

cially the use of a D-Vac portable suction collector, will be widely applicable elsewhere — funds allowing! Altogether this is a fine publication based on much original work, and it is warmly recommended to all dipterists with an interest in this family — I. F. G. MCLEAN.

Notes and Observations

DISCOVERY OF THE LARVAE OF THE LARGE HEATH (COENONYMPHA TULLIA (MÜLL.) IN THE WILD. — Although the larvae of *Coenonympha tullia* have frequently been reared from eggs laid in captivity, they have only rarely been found in the wild and never in any great numbers. It is commonly stated in the literature that the larvae of *C. tullia* feed on the leaves of White Beaked Sedge (*Rhynchospora alba*). However *R. alba* is often very scarce or even completely absent from sites where *C. tullia* is very numerous. One must therefore assume that *C. tullia* has some alternative larval foodplant to *R. alba*. The most likely appears to be cotton grass (*Eriophorum vaginatum*) which I have always found to grow in profusion wherever *C. tullia* occurs.

In early May 1983 I attempted to sweep for the larvae of *C. tullia* in their habitat whilst they were feeding at night. I did this for seven full nights in four different localities in northern England but failed to find a single larva. I therefore assumed either that the larvae must be feeding very low in the grass or that they were on some completely different plant.

During last year's flight season I captured several female *C. tullia* and experienced no difficulty in obtaining eggs from them. The young larvae fed well on *E. vaginatum* during the day. I expected that when they became large after hibernation they would start feeding nocturnally but this was not the case. They continued to feed by day even during their final instar and this prompted me to try to find larvae in the wild again, but this time by day.

On 9th May 1984 I returned to a small moss in south Northumberland accompanied by Mr. Christopher Reid. We searched the cotton grass tussocks systematically and after about ten minutes I found a single larva. It was feeding at the top of a stem of *E. vaginatum* in the centre of a large tussock. Another two hours of searching produced a further fifteen larvae, each one feeding in a similar manner and always in the largest tussocks.

During the next four days we visited four more *C. tullia* localities throughout northern England and managed to find over one hundred larvae. The larvae were most conspicuous in the middle of the day because they were then feeding at the top of the stems. In the early morning and late afternoon they were much deeper in the tussocks and consequently less easy to find.

The only evidence I have of an alternative foodplant was the discovery of a single larva feeding on *Eriophorum angustifolium* at a site in South Yorkshire. However they are known to feed on a number of species of grass in captivity. — T. M. MELLING, Brooklands, 206 Chorley New Road, Heaton, Bolton, Lancs BL1 5AA.

A NOTE ON BREEDING ANAGRUS ENSIFER DEBOUCHE (HYM.: MYMARIDAE). — On the 2nd of April 1982 I collected about 300 stems of *Juncus effusus* from Hengistbury Head, Bournemouth, Dorset. I spent the next two days slitting them open with a razor blade and found about 100 eggs of a species of Homoptera. The eggs were transparent, elongated pear shape. Some of the eggs were clear, others had a yellowish content at the wide end, while others had red dots on either side of the egg. Some of the eggs were parasitised and contained partially developed mymarids with the chitin beginning to form; in others these parasitic imagines were completely developed, lying prone with antennae turned back along their sides. I placed these eggs in petri dishes on blotting paper which I kept dark and moist with distilled water and watched the mymarids at daily intervals. On the 17th of April 1982 I noticed that some of the mymarids had altered their position and the antennae were now bent. I took three eggs to be photographed and upon my return noticed that the heat from the microscope light had appeared to have dried up the eggs, so I laid them in distilled water on a slide ready for dissecting. However, I was called away for a couple of hours and upon my return the mymarids had begun to move again, drawing up their legs in the manner adopted by athletes when limbering up. The most movement was in the head turning from side to side. I placed the slide under the microscope and observed the insect's mandibles being used to bit its way out of the egg. I then found that it was using its mandibles to roll the egg material into a ball, the mandibles moving like hands carefully rolling and turning the ball, so that it may have been getting sustenance from it. The process of turning the ball took several hours and was quite fascinating to watch. Finally, the insect emerged, head first then the antennae followed by the front legs and so on. At this stage the egg-ball was disposed of and once clear of the egg the mymarid proceeded to flick its wings, stretch its legs and occasionally prance like a young horse. The process had taken about twelve hours. Once it was free I was able to identify it as *Anagrus ensifer*, principally by its exceptionally long ovipositor. I placed the mymarid in a three by one cm. tube and it survived without nourishment for six days.

When looking through the *Juncus*, I found *Anagrus ensifer* eating its way through the stem, but could not see any egg ball as witnessed earlier, and I wondered whether this was a substitute for eating its way out of the stem. Occasionally I found mymarids facing the small end of the host egg. In some eggs there were as